Potomac-Raritan-Magothy aquifer system: Alternating layers of sand, gravel, silt, and clay. Confined.
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50-1,800 500-1,000 2,000
Non-Coastal Plain aquifers: Glacial valley-fill aquifers: Sand, gravel, interbedded silt and clay. Generally u neon fined except where overlain by lake silt and clay or till.
Aquifers in the Newark Group: Shale and sandstone: Shale, sandstone, some conglomerate. Unconfined to partially confined in upper 200 ft; confined at greater depth.
10-300 100-1,000 2,000
30-1,500 10-500
1,500
Highly productive and most used confined aquifer in the Coastal Plain. Aquifer system extends throughout Coastal Plain and attains maximum thickness of 4,100 ft. Includes two aquifers in northern Coastal Plain: Farrington and Old Bridge aquifers. Salty water increases with depth and in downdip direction. Excellent water quality but large iron concentrations in some areas.
North of terminal moraine occur principally as channel fill in preglacial stream valleys; south of moraine, as outwash plains and valley trains. Important aquifers in Bergen, Essex and Morris Counties. Water quality suitable for most uses.
Most productive aquifers in Essex, Passaic and Union Counties. Water generally hard; may have large concentrations of iron and sulfate. Saltwater has intruded areas of large ground-water withdrawal near bays and estuaries.
SOURCE: U.S. Geological Survey, 1984.